

*Oak-Hill Cemetery*

---

# OAK-HILL CEMETERY,

OR

A TREATISE

ON

THE FATAL EFFECTS RESULTING FROM THE LOCATION OF CEMETERIES IN THE IMMEDIATE VICINITY OF TOWNS.

---

BY A PHYSICIAN.

---

*Miss Boy 5*



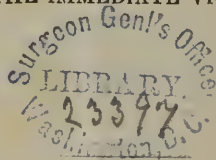
# OAK-HILL CEMETERY,

OR

## A T R E A T I S E

ON

THE FATAL EFFECTS RESULTING FROM THE LOCATION OF CEMETERIES IN THE IMMEDIATE VICINITY OF TOWNS.



BY A PHYSICIAN.

WASHINGTON.  
PRINTED BY HENRY POLKINHORN.

MDCCCL.



---

Copy-right secured according to law.

---

# OAK-HILL CEMETERY,

OR

## A TREATISE,

*On the fatal effects resulting from the Location of Cemeteries in the immediate vicinity of Towns.*

THE following Treatise is intended to awaken the people of the District, and particularly the inhabitants of Georgetown, to a sense of a most serious danger, which threatens their health and their lives; and to induce them to unite in making an effort to avert from themselves a dreadful calamity.

To this end, it is proposed to state the impressions of the most intelligent communities, in relation to the practice of inhumation in or near towns: to give the opinions of learned divines, and of eminent medical men, who have patiently investigated this subject, and to present some of the facts on which these opinions and those impressions were founded. We will then proceed to show, that the establishment of the Oak-Hill Cemetery, in the vicinity of Georgetown, must necessarily be followed by the most fatal consequences.

The governments of antiquity that were remarkable for their intelligence, the Jews, the Greeks, and the Romans, regarded this subject as one of vast importance,—examined it with the greatest attention, and were led to the wise determination to prohibit the location of burial-places unless at a distance from their towns or cities.

About the middle of the last century, the governments of modern Europe seem to have forgotten the experience of the ancients, and to have disregarded their wise precaution. Actuated by their religious zeal, the people foolishly imagined that the burial of their bodies in consecrated ground, and especially in the neighborhood of churches, would be a protection against the enemy of their souls; and consequently, the custom of burying in the midst of cities, in and near the churches, became almost uni-

versal. The frequent prevalence of epidemics, which devastated their cities, brought them, however, to their senses.

The people of France, informed by their medical advisers of the true cause of these misfortunes, by continual out-cries and importunate entreaties, induced the ecclesiastical as well as the civil courts to interfere in their behalf. Ordinances and decrees were passed entirely abolishing the custom, and prohibiting, under the severest penalties, the burial of the dead within a reasonable distance of the towns or cities. By this means, the health of all the towns of France was sensibly promoted.

Nearly all the enlightened nations on the Continent followed the example of France. But, notwithstanding all that had been done by their neighbors, the people of England still clung to their ancient customs, and silly prejudices, with the dogged obstinacy which is characteristic of that nation. And even when, convinced by sad experience, the people were willing to yield up these prejudices, the government still held out. They were fearful of interfering with "vested rights," *as if the vested rights of a few individuals were to be placed in competition with the health and lives of whole communities.* The cruel epidemics, particularly those in the form of typhus and typhoid fevers, which were constantly ravaging their metropolis, and other cities, forced upon them also, a conviction of the necessity of adopting some measures of relief. Accordingly, in 1842 a committee of the British Parliament was appointed to investigate the cause of these epidemics, and to suggest some means by which they might be arrested. Their report, in relation to the subject before us, is thus summed up:

"Your committee have also obtained the evidence of men of superior education and acknowledged ability; of clergymen, and high dignitaries of the church, and after a long and patient investigation, your committee cannot arrive at any other conclusion, than that the nuisance of interments in large towns, and the injury arising to the health of the community from the practice, is fully proved."

The conclusion of the report of another committee of the British Parliament, appointed in 1843, to investigate this subject, is in these words: "That, inasmuch as there appear to be no cases in which the emanations from human remains, in an advanced stage of decomposition, are not of a deleterious nature, so there is no case in which the liability to danger should be incurred, either by interments or by entombments in vaults, amidst the dwellings of the living; that it may be established as a general conclusion, in

respect to the physical circumstances of interment, from which no adequate ground of exception has been established, that all interments in towns, where bodies decompose, contribute to the mass of atmospheric impurity, which is injurious to the public health."

Based on the above reports, a law was subsequently passed, prohibiting the establishment of any cemetery within a considerable distance of any inhabited dwelling.

In the United States, the State of New York and the State of Pennsylvania have passed laws of a similar character.

The minutes of evidence taken before the committees of the British Parliament, contain the opinions on this subject of some of the most eminent medical men of the present day. A few of them are given :

By James Copland, M. D., F. R. S. "I believe the health of large towns is influenced by four or five particular circumstances ; *the first, and perhaps the most important, is the burial of the dead in large towns.*"

Sir Benjamin Brodie, when asked whether he considered the crowded state of the church-yards as one cause of fever or disease in the metropolis, answers : "I have always considered that as one cause. *My opinion is, that interments in the interior of this town, must be injurious to the health of the town.*"

W. F. Chambers, M. D., in a letter to the chairman of one of the committees, states : "I have no doubt that the fevers which are called typhus, even in this cleanly quarter of London, (Brooke Street,) owe their origin to the escape of putrid miasma. *I should presume that over crowded burying-grounds would supply such effluvia most abundantly.*"

The opinion of Dr. Southwood Smith, given to the Poor Law Commissioners, on another occasion, has an especial bearing on the subject before us : "It is matter of experience," says he, "that during the decomposition of dead organic substances, whether vegetable or animal, aided by heat and moisture, and other peculiarities of climate, a poison is generated, which, when in a state of high concentration, is capable of producing instantaneous death, by a single inspiration of the air in which it is diffused."

Experience also shows that this poison, even when it is largely diluted by admixture with atmospheric air, and when consequently it is unable to prove thus suddenly fatal, is still the fruitful source of sickness and mortality, partly in proportion to its intensity, and partly in proportion to the length of time and the constancy with which the body remains exposed to it."

"The exhalations which accumulate in close, ill-ventilated, and crowded apartments, in the confined situations of densely popu-



lated cities, where no attention is paid to the removal of putrefying and excrementitious substances, consist chiefly of animal matter ; such exhalations contain a poison which produces fever of a typhoid character. 'There are situations, as has been stated, in which the poison generated is so intense and deadly, that a single inspiration of it is capable of producing instantaneous death ; there are others in which a few inspirations of it are capable of destroying life in from two to twelve hours ; and there are others, again, in which the poison generated, although not so immediately fatal, is still too potent to be breathed long, even by the most healthy and robust ; without producing fevers of a highly dangerous and mortal character."

G. A. Walker, surgeon, who has examined this whole subject thoroughly, (a copy of whose very able work, entitled "Gatherings from Grave Yards," every one, who takes an interest in promoting the public health should have in his library,) thus remarks : "*It would seem* that interments of the dead within churches or vaults, or in burying grounds surrounded with houses, or in the immediate vicinity of densely populated cities or towns, is so familiar from its frequent or daily occurrence—accidents *clearly* traceable to the influence of putrefying effluvia so seldom, comparatively, arise from the practice of inhumation, that the most perfect indifference appears to prevail upon the subject ; no danger seems to be dreaded, no fear excited, no apprehension entertained, of the injurious and destructive agencies which are constantly in operation, and armed with invisible and irresistible powers. It would not be difficult to show, that some of the most afflictive dispensations of Providence, have originated in the contamination of the atmosphere from putrefying animal substances, and that to the neighborhood of the "Grave Yard" may be attributed the violence, if not the origin, of some of the most destructive diseases which have depopulated *the human race*."

In France, Drs. Haguénot, Maret, and Navier, were principally instrumental in arousing the attention of the people to the vast importance of this subject. They set it forth in such lively, but true colors, that the people at once demanded, in tones not to be misunderstood, that the measures recommended by them should be adopted.

In the preamble to a decree in the Parliament of Paris, the following remarks occur : "The Bishops of such places as were afflicted by it have issued ordinances, and laid them before this court for confirmation, which has been granted to some, and solicited by others—pastors of the second degree have united with



the higher dignitaries, in petitioning for a civil regulation on this point. Medical men assure us that the vapours exhaled from putrefaction fill the air with chemical compounds dangerous to health, and productive of malignant diseases. The epidemics which prevail in warm seasons confirm their assertion. We know, however, that this decree is against the wishes of a certain class, who found claims upon a possession in itself an abuse, or upon titles yielded through complaisance, or obtained without any legitimate grant, or upon a permission acquired by means of a small sum, which they imagine entails an hereditary right to burial within a church ; as if possession were a right superior to justice, or that a prescriptive indulgence should be continued in despite of its injury to the public good ; or that a certain sum of money were an equivalent for the health and life of their fellow-citizens."

The Arch Bishop of Toulouse issued an ordinance, the preamble to which contains so many just observations, that we are constrained to insert it at length. It relates to burials in churches, but the remarks are equally applicable to burials in or near towns.

# ORDINANCE

OF

## THE ARCH-BISHOP OF TOULOUSE, CONCERNING INTERMENTS IN CHURCHES.

---

*“Stephen Charles de Lomenie de Brienne, by the Grace of God and the Holy Apostolic See, Arch Bishop of Toulouse, Councillor of the King, &c., to all Ecclesiastics, secular or regular, and to all the laity of this diocese, sends greeting and blessing :*

*“Whereas, the venerable Provost and Clergy of our Metropolitan Church have represented to us, that, in violation of the holy canons, interments in that church have increased exceedingly, and that the air is sensibly contaminated by fetid exhalations from vaults, which are not deep, and are continually re-opened for the admission of fresh bodies.*

*“Similar complaints have been transmitted to us from several parts of this diocese, and although we have deferred any notice till now, yet our dearly beloved brethren need not accuse us of neglect, delay, or indifference, in this important affair. Wise ordinances require much time for consideration, and should be offered to minds prepared to receive them. Measures too prompt might have proved revolting to your sensibilities, or you might have thought such restrictions of your privileges sufficient, as had already been enforced by vanity, or to which custom lent a justification. To secure your docility and compliance, it was necessary that your eyes should be opened to your danger by repeated accidents, sudden deaths, and frequent epidemics. It was necessary that your own wishes, impelled by sad experience, should compel our interference ; and that the excess of the evil should call, in a manner, for an excess of precautionary measures.*

*“Believe not, dearly beloved brethren, that our solicitude and anxious care for the public health is the only motive that induces us to break silence. Such is the harmony always existing between religion and sound policy, that what is acknowledged as decorous and useful by the one, is also commanded and prescribed by the*

other. To the instinct of self preservation, which calls loudly for a reformation of the present system of burial, we may add the commands of God, which direct us that we be careful of our lives, that we may serve Him and prepare for a happy eternity; and the orders of the church, which always reprobated as a profanation the general admission of the dead within consecrated walls, and in places held sacred; and the dictates of our Christian duties, which require an assiduous attendance at the temple, all pretexts and pretences to the contrary notwithstanding. May our subsequent details and remarks enlighten your piety without enfeebling it, and without impairing the respect due to the memory of the dead, *confound that inconsistent vanity which follows them even to the grave.*

“This respect is a natural sentiment in every stage of society, and depraved indeed must those be that do not feel it. No social ties could unite us, if death were able instantly to extinguish affection in the hearts of survivors. He who feels no emotion of grief or pity beside the grave of a fellow being, could have borne no love to that being during life. “‘We respect,’ says St. Augustine, ‘every trifle that reminds us of a beloved object; the ring or the dress worn by a father are dear to his children’. How can we other than respect the ashes of those who are dear to us; or how other than endeavor to prolong the existence of their frail remains?

“It would then be an infraction of every law, as say Saint Augustine and Origenus, *to neglect the burial of the dead, as if they were mere brutes; or to throw away bodies that have been the abodes of rational souls, and temples of the Holy Ghost.* But these duties have legitimate limits. While religion regulates all that can be conducive to the rest of the departed, and permits the indulgence of a natural sorrow, it forbids every expression that proceeds from pride and vanity. ‘Why,’ says St. Jerome, (*in vita Pauli*), ‘does a desire for appearance exist amid mourning and tears? Why should the dead be clothed in sumptuous vestments? cannot the rich rot away unless in the same gorgeous apparel that decorated them when alive? Pompous funeral processions,’ adds St. Augustine, ‘and expensive monuments, may perhaps console the living, but they cannot be of any use to the dead.’ ‘Of what use to them are these idle distinctions?’ exclaims St. Chrysostom, ‘their memory and their worth, and not their perishable remains, should be honored. Since, then, ye wish to give departed friends rational and Christain-like testimonies of esteem, love, and regret, *do for them and for yourselves all that can contribute to the glory of God.* If they

be virtuous, be so also ; if vicious, correct the mischief they have done, and continue whatever good intentions they may have assumed. It is by the virtues of their children that parents are honored in the grave, and these are their only worthy and acceptable obsequies.'

"These principles naturally lead us to ascertain what place, then, should be appropriated to the disposal of our departed brethren. The custom of praying for them, probably induced the early Christians to deposit them near each other in the same ground ; this was the origin of cemeteries. St. Chrysostom informs us, (Hom. 84, in Math.) that cemeteries were not permitted in cities, because the presence or vicinity of the dead would not only contaminate pure air, but incommode the inhabitants by the stench they would occasion. *Nullum in civitate sepulchrum struitur.* If such, says a council, (Hom. 74,) is the privilege of cities, how evident it is that a church has a right to exclude interments from within her walls. In the council of Brague, burials in churches were forbidden, and the house of God was decreed to be open only to the relics of apostles and martyrs. *Nemo Apostolorum vel Martyrum sedem humanis corporibus aestimet esse concessam,* (in the year 563, Can. 18.) The bodies of even Emperors were only admitted to the porticoes or chapels of temples. Constantine, himself, to whom the Church was so much indebted, and so grateful, asked no higher favor than to be buried under the portico of the church of the Holy Apostles. Martyrs and confessors only were admitted ; because, as St. Ambrosius remarks, it was '*just that those who had been victims to their faith, should be deposited near the altar where was offered the sacrament of the sacrifice of their divine Lord and Master.*'

"Such was the primitive discipline in relation to interment ; and what is more interesting in this statement, dearly beloved brethren, is, that legitimate exceptions have been used as precedents for its infringement, so true it is, that the slightest compromise of a law leads finally to its destruction, or total violation.

"Those who, by an exemplary life, had acquired a reputation for holiness, were not allowed to partake of the privilege of martyrs ; but this holiness was not as easily substantiated as the heroism of those who sealed their faith with their blood ; and as the number of the Christians increased, proof became still more difficult and obscure. Indulgence was then used ; appearances soon assumed the place of reality, and equivocal signs of piety obtained prerogatives due only to genuine zeal.

"The clergy, on account of their sacred functions, and the no-

bility, whom their high rank made more desirous to shun the dishonor or scandal of vice, claimed to be interred within the temple. Founders of churches became invested with the same right, and transient benefactors required the same reward for their donations. The descendants of both claimed as a patrimony that which had only been granted to individual merit. When the privilege was thus general, a refusal was an exception that threw an odium on the unsuccessful applicant. When the admission of any one was a favor, none could be excluded who had any pretence to offer. In the early ages, burial in churches had been expressly forbidden, or even inhumation within cities. But, by the gradual increase of a fatal condescension, the evil has arrived at a height that demands attention. Cemeteries, instead of being beyond our walls, are among our habitations, and spread a fetid odor even in the neighboring houses. *The very churches have become cemeteries.* The burial of Christians in an open place, set apart for the purpose, is considered a disgrace; and neither the interruption of the holy offices, occasioned by the repeated interments, nor the smell of the earth, imbued with putrescence, and so often moved; nor the indecent state of the pavement of our churches, which is not even as solid as the public street; nor our repugnance to consign to the house of the Lord the impure bodies of men worn out with vice and crimes, can check the vanity of the great, whose empty titles and escutcheons must be hung on our pillars, for the sake of their empty distinctions, or of the commonalty, who must ape the great. Death, at least, should level all men; but its lessons are lost, and the dearest of interests, self-preservation, must yield to the reigning foible.

“The progress of this evil, dearly beloved brethren, may be determined by the efforts of the Church to overcome it. Sometimes her prohibitions have been express; at other times they have been intended to restrict the favor to a few of the faithful. When she has permitted interment in the purlieus or porticoes of temples, it was to prevent it in the church itself; when she has admitted all ecclesiastics, it is because they were pre-supposed to be all of holy lives; when founders were favored, and even benefactors, it was to exclude, by such an exception, all others. She permits exceptions without a view to their becoming hereditary, and tolerates unfounded rights to endow her ministers with greater power for the adoption of measures for the prevention of the evil effects of her former condescension.

“The Gallican Church has shown much zeal in endeavoring to recall the ancient discipline on this point. Interment in churches



is prohibited by almost every council held in this kingdom ; almost all our rituals and synodal statutes forbid it ; and latterly, many bishops, and particularly those of this province, have done their best to correct this abuse.

“ But, without derogating from the respect due to their wisdom and their labors, may we not say that this temporizing plan has rendered their whole work useless ?

“ If inhumations around churches is to be allowed, can cities be perfectly salubrious ? If priests and laymen, distinguished for piety, are to be buried within, who shall judge of this piety, or who presume to refuse their testimony ? If the quality of founder or benefactor is a title, what rate shall fix the privilege ? If the right is hereditary, must not time multiply the evil to excess, and will not our churches at length be crowded as now beyond endurance ? If distinctions in ranks are to exist after death, can vanity know any limitation or judge ? If these distinctions are to be procured for money, will not vanity lavish riches to procure them ? and would it be proper for the church to prostitute to wealth, an honor due only to such as have been rendered worthy by the grace of God ?

“ We are disposed, dearly beloved brethren, to show all possible moderation in this necessary reformation ; though charged to be strict in the fulfilment of our pastoral duties, we are allowed a discretionary power, and can consult your habits, your opinions, and even your prejudices, and all that may conciliate your interests with the glory of God ; but woe to us, if blinded by weakness, we lose sight of the experience of past ages, and suffer things still to continue, that have till now served, and can only serve, to perpetuate the disorder.

“ The only real means of reform, is to re-establish the ancient rules and observances, as did Pope Urban IV., when he wished to abolish the indecent custom, which had insensibly crept into the church of St. Peter, at Rome, of burying together *the pious and the profane, the saint with the sinner, the just with the unjust* ; and to unite to the detriment of Christians, and the destruction of the respect due to the Church, what God would eternally separate. And St. Charles Borromæus ordered that the neglected custom of interring in cemeteries should be resumed entirely. The same was done in the last century by the Bishop of Seulis, and some few having appealed from the ordinance, it was confirmed by the parliament of Paris. The civil law could not but agree on this point with our religious canons, because the preservation of the lives of the members of a community, is a duty of the first magnitude ;

and it suffices to enter our churches, to be convinced of the baneful effects of the fetid exhalations in them.

“Some of our dearly beloved brethren may blame the rigor of our ordinance; but can they make any reasonable complaint? Churches were not intended for sepulchral monuments; and so little was such a use of them ever expected, that, according to the remark of a celebrated canonist, there is no prayer in the liturgy relating to such a ceremony, while there are some expressly intended for the benediction of burying grounds. And do you think that titles, whose abuses *would continually cry out against them*, are to prevail over the dignity of our temples and the sanctity of our altars?

“Would you insist for this privilege on account of the standing, the offices, the rank, you hold in society? We have every reason to believe, that those who have the greatest right to the distinction will be the least eager to obtain it. Exceptions are odious, and multiply pretences and objections. Who will dare to complain when the law is general; and what law can more justly be general than one that relates to the grave?

“Would you say that we are depriving a holy life of its rewards and prerogatives? If the voice of the pulic testified to the sanctity of your career, how joyfully would we receive your bodies into our temples, as those of the martyrs were welcomed by the primitive Church! But piety, while meriting and obtaining the honors reserved for the saints, is far from assuming them as her right: and while she feels that peculiar benedictions have been passed upon public burying grounds, she acknowledges that *the most magnificent obsequies are of no use to the sinner*.

“Would you reproach us with depriving you of a right, bought by the donations of your ancestors? But do you think that those virtuous men, from whom you are proud to derive your descent, wished to leave to their posterity a right to disturb our holy mysteries, and to spread pestilence among their fellow-citizens? Then take back their gifts, if these are to be construed into titles in fee simple. Our rules for the future must not be violated; and the Church will satisfy your avarice rather than your pride.

“We will not suspect our worthy coadjutors, in the clerical function, of regretting the privilege so long granted to their holy habits. We are obliged daily to sacrifice ourselves for the happiness and weal of our people, and will therefore think the less of a renunciation of a gratification that might be harmful to them. Our most precious advantage is the power we enjoy of being examples to them, in all that is useful and religious; and great indeed will be



our pleasure, if our example engages others to allow, without murmur or complaint, the re-establishment of a law equally necessary for the good of society and religion.

“Ye whom the bonds of the cloister have united under the yoke of the Lord, will you object to the retrenchment of your funds, that this ordinance must produce? No; for you wish not to support existence at the expense of the lives of others. We will do all for you that just toleration will allow; but you yourselves would blame us if, rather than deprive you of a source of revenue, we were to authorize your chapels to continue, or to become, centres of infection and of death. Render your temples worthy of the presence of the Deity; gain the attendance of the faithful by assiduous and fervent prayer; inspire confidence by the decorum of your conduct, and the purity of your manners, and you will find the gratitude of the pious lavish alms upon you, to supply the loss you have cheerfully undergone for the public weal.

“And you, right worthy magistrates, who are charged with the care of the laws, be assured, that it is with no view to pass the bounds of our powers, that we revise our canons. We know that interment is a civil affair. We would direct nothing relating to it, without your agreement and participation. Then let the perfect accordance of our measures, blend our united decrees into one authority; and while we speak in the name of God, whose ministers we are, secure obedience to our mandates in the name of the King; for this affair touches not only the credit of the Church, but the interests of the people. We have investigated and examined the request of our venerable Chapter; the petitions from divers parts of our diocese; the *proces verbaux* of the inspection of many parishes, from which it appears that the abuse of church interment was carried to its height; and, finally, the reports and opinions of physicians on the pernicious consequences of this custom; and therefore we, as far as in our power lies, and in full confidence that the civil authorities will sanction our ordinances, have ordained and enacted, and do ordain and enact,” &c.

---

We proceed now to give some few of the facts on which the above opinions of learned men were founded. In doing this, we will first state facts showing the immediate operation of the poisonous effluvia on individuals.

An American merchant ship was lying at anchor in Wampoa Roads, 16 miles from Canton. One of her crew died of dysentery. He was taken on shore to be buried. No disease of any kind had occurred in the ship, from her departure from America, till her arrival in the river Tigris. Four men accompanied the corpse, and two of them began to dig a grave; unfortunately, they began in a spot where a human body had been buried, about two or three months previously. The instant the spade went through the lid of the coffin, a most dreadful effluvia issued forth, and the two men fell down nearly lifeless. It was with the greatest difficulty their companions could approach near enough to drag them from the spot, and fill up the place with earth. The two men then recovered a little, and with assistance reached the boat, and returned on board. On the succeeding morning they presented the following symptoms: very acute head-ache, with a sense of giddiness and dimness of sight, (which had existed more or less from the opening of the grave); eyes of a peculiar muddy appearance; oppression about the præcordia; dull, heavy pain in the regions of the heart and liver, with slight palpitation at times, and fluttering pulse; sense of extreme debility, with occasional convulsive or spasmodic twitchings of the muscles of the lower extremities; nausea; slight diarrhea; rigors, succeeded by flushing of the face, neck, and upper extremities; tongue white and much loaded; pulse from 110 to 120, weak and irregular; urine scanty and high colored, and skin sometimes dry, sometimes covered with a clammy sweat. On the fourth day from the commencement of the attack, numerous petechiæ appeared over the breast and arms, and in one of the patients a large bubo formed in the right groin, and another in the axilla of the same side, which speedily ran to suppuration. To one, the disease proved fatal on the evening of the fourth day; to the other, on the morning of the fifth.

One of the men, not immediately engaged in digging the grave, was attacked on the eighth day from his being on shore. The symptoms resembled those in the preceding cases. For three days previously to the avowed attack of illness, there had been pain, and enlargement of one of the inguinal glands, which, at the period he was visited, had acquired the size of a hen's egg; and early in the disease, the breast and arms were covered with petechiæ. By active treatment this person recovered, as likewise did the fourth man, who had slight indisposition, of no decided character."—*American Journal of Health*.

"In the month of July, 17—, a very corpulent lady died at ——. Before her death she begged, as a particular favor, to be buried in the parochial church. She had died on Wednesday, and on the following

Saturday was buried, according to her desire. The weather, at the time, was very hot, and a great drought had prevailed. The succeeding Sunday, a week after the lady had been buried, the Protestant clergyman had a very full congregation, upwards of nine hundred persons attending, that being the day for administering the Holy sacrament. It is the custom in Gerinany, that when people wish to receive the Sacrament, they neither eat nor drink until the ceremony is over. The clergyman consecrates the bread and wine, which is uncovered during the ceremony. There were about one hundred and eighty communicants. A quarter of an hour after the ceremony, before they had quitted the church, more than sixty of the communicants were taken ill : several died in the most violent agonies ; others, of a more robust constitution, survived by the help of medical assistance ; a most violent consternation prevailed among the whole congregation, and throughout the town ; and it was concluded that the wine had been poisoned. The sacristan, and several others belonging to the vestry, were put in irons. The persons arrested underwent very great hardships ; during the space of a week they were confined in a dungeon, and some of them were put to the torture ; but they persisted in their innocence.

“ On the Sunday following, the magistrate ordered that a chalice of wine, uncovered, should be placed, for the space of an hour, upon the altar ; the hour had scarce elapsed, when they beheld the wine filled with myriads of insects. By tracing whence they came, it was perceived, by the rays of the sun, that they issued from the grave of the lady who had been buried the preceding fortnight. The people, not belonging to the vestry, were dismissed, and four men were employed to open the vault and the coffin ; in doing this, two of them dropped down and expired on the spot ; the other two were only saved by the utmost exertions of medical talent. It is beyond the power of words to describe the horrid appearance of the corpse, when the body was opened. The whole was an entire mass of putrefaction ; and it was clearly perceived that the numerous insects, together with the effluvia which had issued from the body, had caused the pestilential infection, which was, a week before, attributed to poison.”—*N. Y. Gazette of Health.*

“ On the 17th of August, 1744, at 6 o'clock in the evening, Wm. Baudon, a layman, was buried in one of the common graves of the parish church of Notre Dame, at Montpelier : Peter Balsa!gette, a street porter, was employed as grave-digger ; he had scarcely descended into the grave when he was seen to be convulsed, and he soon fell down motionless ; Joseph Sorroa endeavored to draw out the unhappy man ; he descended, holding by a rope ; he had scarcely seized the dress of the street porter, when he became insensible ; he was drawn up, half dead ; in a short time he recovered his senses, but he experienced a

kind of vertigo and numbness, the fore-runner of convulsions and faintings, which displayed themselves a quarter of an hour afterwards. During the night he felt weak, his whole body trembled, and he experienced palpitations, which were removed by bleeding and cordials. He was for a long time pale and emaciated, and throughout the city bore the name of the "Resuscitated."

This sad event did not prevent John Molinier from exposing himself, with a similar zeal, to save the street porter. But scarcely had he entered the grave, than, feeling himself suffocating, he gave signs to be drawn up, and supported. He came up so weak and so faint, that a moment's delay would have been fatal. Robert Molinier, brother of the last, stronger and more robust, thought he might brave the danger, and gratify the kind feelings by which he was influenced; but he fell a victim to his temerity, and died as soon as he had reached the bottom of the grave.

"This tragical scene was terminated by the death of Charles Balsalgette, brother of the street porter, who remained in the grave. As he was obliged to arrange the body of Robert Molinier, he staid longer than he ought, and was forced to get out. He thought he could safely descend a second time, by placing between his teeth a handkerchief, dipped in Hungary water. This precaution was useless; he staggered to the ladder, and made every effort to ascend, but at the third step he fell back lifeless."—*Dr. Huguénot.*

We will now proceed to state a few instances, to show that the exhalations from the human body, when putrefying, may give rise to epidemic diseases. In doing this, we shall select from a vast number of instances at hand, which have occurred at various intervals, from the time this subject was first investigated, in France, up to the present time. We have been guided in this selection, by the brevity of the accounts given.

"We learn from Haller, that a church was infected by the exhalations of a single body, twelve years after burial, and that this corpse occasioned a very dangerous disease in a whole convent."

"Raulin relates, that the opening of a corpse occasioned a dreadful epidemic in the plain of Armagnac. Sensitive and nervous persons frequently became ill, and fainted, after having been attacked with cadaverous exhalations, when walking along a cemetery."

"Dr. Maret points out the evils which may be produced by animal exhalations. A mild catarrhal fever, he says, prevailed at Saulieux, in Burgundy. The body of a very fat man was buried in the parish church of St. Laturin; twenty-three days afterwards, a grave was opened by the side of the former, to bury a woman there, who had died of the same disease. A very fetid odor immediately filled the church, and affected all those who entered. In letting down the body, a rope slipped, by which the coffin was shaken, a discharge of sanies followed,



the odor of which greatly annoyed the assistants. Of one hundred and seventy persons who entered the church, from the opening of the grave until the interment, one hundred and forty-nine were attacked with a malignant putrid fever, which had some resemblance to the reigning catarrhal fever; but the nature and intensity of the symptoms left no doubt that the malignity was owing *to the infection of the cathedral.*

"In 1744, one third of the inhabitants of Lectouse perished from the ravages of a malignant fever, which manifested itself soon after an improvement in the town, requiring the removal of a burying ground."

"At Riom, in Auvergne, the earth was removed from an ancient cemetery, with the view of embellishing the city. In a short time after, an epidemic disease arose, which carried off many persons, particularly of the poorer class, and *the mortality was especially prevalent in the neighborhood of the cemetery.* Six years before, a similar event had caused an epidemic in Ambert, a small town in the same province."

"Such a train of facts," says Mr. Walker, (from whose work, already referred to, most of the preceding facts have been taken,) "leaves no doubt of the infection produced by the exhalations of dead bodies."

"But why seek elsewhere," continues the same writer, "for examples of that which passes daily under our own review? If we were disposed to collect here all the observations of those who have preceded us, we should have innumerable proofs of what we advance. Owing to the small number of the learned, or of those capable of transmitting to posterity the fatal effects of interments in churches and cities, or, rather, on account of the respect with which the custom of burying in temples has always been regarded among us, epidemic diseases, which have from time to time depopulated our cities, have often been attributed to other causes. The smallest district preserves the recollection of similar events; and if, in several countries, it is in contemplation to re-establish the ancient common cemeteries beyond towns, the strongest and most influential motives have given origin to the undertaking."

"Putrid and malignant fevers, and periodical diseases, often prevail in densely populated cities, when the remote cause of them cannot be ascertained. Is it not possible that this cause, of which we are ignorant, and which is demonstrated only by its fatal effects, *is no other than the interment in cities?*"

"We have said enough to prove the indispensable necessity of placing cemeteries beyond cities, to justify the wise dispositions of the administration in this respect, and entirely to destroy those prejudices which have no other support than public credulity—prejudices directly opposed to the interests of those who circulated them, and who would abandon them if they were more enlightened, and if they could calculate and foresee everything which could be prejudicial to the health of their

fellow-citizens. How can we, indeed, put into competition the powerful suffrage of the universal custom of all times, and of the most polished nations, with the transient complaints of a few, always prejudiced in favor of the customs of the day, utterly incapable to know their own interests, influenced by the uncertainties of opinion, and ever undecided in the choice of what is useful?"

"The examples just given by several princes of Europe, justify the hope that the custom of placing cemeteries at a distance from cities, will be re-established. Before subjecting ourselves to the charge of innovation, we have thought proper to look into the records of antiquity, and to ascertain if the custom we wish to destroy has not been recently introduced, and if it is not the effect of a relaxation of discipline."

But, notwithstanding all that has been said and done in relation to this important subject, there are some who will exclaim—"All this is foolishness; we have lived all our lives in towns, where there have always been cemeteries, and have never experienced any ill effects." And some will say, they have lived adjoining to, or in the very midst of "grave yards," without having their health affected; and yet these very persons will, at the same time, furnish, in their appearance, unmis-takeable evidences of diseased viscera and deranged health.

On the rivers in Maryland and Virginia, emptying into the Chesapeake, men may be found, whose principal occupation is to wade through the marshes, for the purpose of spearing muskrats, and shooting ducks. Their health is seriously affected, as may be supposed. Their limbs are small and wasted; their skin approaching in color to saffron; their countenances pale, sallow, and wan, and their abdomens preternaturally enlarged with diseased spleen, liver, stomach, and intestines. If you meet one of these men, and inquire about his health, he will probably tell you he is very well; that he believes he enjoys as good health as most people. If you tell him he is mistaken; that he is suffering from the influence of the malaria, and deleterious vapors arising from the marsh, he would consider you a fool. He is not conscious of any malaria or vapors of any kind, and it would be worse than idle to endeavor to convince such a man of his real condition.

The commissioners of the Sanitary Commission of the British Parliament, state, in their report, that in the performance of their duties, they entered some houses in London, where their nostrils were assailed with the most villianous compound of smells, arising, in some instances, from large cess-pools uncleared, immediately under the houses; in other instances, from decomposing human bodies—the rooms being over vaults—the exhalations from which passed up in volumes through the seams of the floor; and in other instances, again, in rooms with windows opening out upon cemeteries, whence the same exhalations were brought by the winds.

When the commissioners, almost overcome by the fœtor, expressed their disgust, the persons inhabiting these places were surprised; *they* thought the air remarkably pure and salubrious; they could perceive nothing wrong about it. When asked as to the state of their health, they declared it was very good, notwithstanding it was but too evident to the commissioners, from their pale countenances and emaciated forms, that they were then actually suffering from the influence of the poison contained in these exhalations.

Let those who apprehend no danger from the presence of cemeteries in towns, clearly understand that it has been proved, beyond the possibility of a doubt, that the cause of many diseases, and more especially of epidemic diseases, is contained in the exhalations arising from putrefying animal substances—that the “grave yard” is the most fruitful source of such exhalations—that the cause of disease, to become active, requires a certain combination of circumstances, of the exact nature of all of which we are ignorant—that some of these circumstances are, that the nerves or nervous system of persons exposed to it, must be in a peculiar condition—that for a more extensive operation of such cause, giving rise to epidemics, a peculiar condition of the atmosphere is necessary, and that we are totally ignorant of the precise nature of these conditions, whether of the person or of the atmosphere.

If all this has been proved, then it is evident that our only safety consists in removing this cause of disease to a distance from us, and in placing it under circumstances that may control or prevent its operation.

It is the opinion of medical men, confirmed by the suggestions of common sense, that cemeteries should be placed on high ground, where there are few or no trees, that the exhalations, always arising from them, may be speedily diluted, and thus rendered comparatively innocuous.

“Trees, and other vegetable growths, absorb carbonic acid gas, but they do not absorb the subtle poison which has been shown to be the cause of disease, and which is contained in these exhalations. This is proved by the fact that the offensive odor from a dead animal is more perceptible, and spreads itself more readily, in the woods, than in open grounds.

In 1819, Congress passed a law incorporating a company for the establishment of “Oak-Hill Cemetery.” This cemetery consists of about 15 acres of land, lying nearly in the form of a square, and densely wooded with forest trees. The grounds adjoining it, on the east and on the west, are also thickly covered in wood. It is bounded on the north by Rock Creek, and on the south by one of the streets of Georgetown.

The eastern boundary line runs at the bottom of a deep valley, throughout its whole length, from south to north. From about the



middle of this valley another deep valley or ravine runs up, through the middle of the cemetery, to its western line. From both of these valleys the rays of the sun are almost entirely excluded, by the foliage of the heavy growth of timber with which they are covered.

Near the bottom of the ravine running through the middle of the cemetery, and not far from its intersection with the eastern valley, a large receiving vault is constructed, in which are now entombed some twenty or more bodies. The side of the hill north of the ravine and above the receiving vault, is being prepared for graves: other parts of the valley are intended for private vaults.

The principal road enters at the south, from the street, and winding down towards the western extremity of the middle valley, runs along its bottom to its intersection with the eastern valley, then with that valley to Rock Creek, and up and by the side of the creek, to the north-west corner of the cemetery, where the road terminates.

If the topography we have attempted to give be understood, it will be at once apparent that the putrid exhalations from the receiving vault—from the graves on the side of the hill, (for it is impossible to confine this subtle fluid even in the deepest grave), and from the other vaults, when constructed, must gravitate into the valleys along the whole course of the principal road, and accumulate there. The process of accumulation, favored by the heavy and damp atmosphere of the valleys, must go on, until the effluvia reaches so high a state of concentration, that its deleterious influence might be extended far and near.

Road street, along the Heights of Georgetown, on which the cemetery binds, is a favorite resort with the people of the district, when taking their evening recreations, whether walking or riding. Many would in this way be brought, unconsciously, under this dangerous influence. Many would resort to the cemetery as mourners, and many from mere idle curiosity, all of whom would be thus exposed to imminent danger. But what effect would this deadly atmosphere produce on the funeral trains, slowly marching along, wholly enveloped in it, and respiring it, it might be, for hours?

The result of the operation of the causes we have referred to, even under the most favorable circumstances, are sufficiently alarming; but the effect will be awful when these causes have their efficacy increased ten, twenty, it might be an hundred fold, by the prevalence of a fatal epidemic.

This is not all! A high wind at such a time might sweep this huge mass of poisonous vapor over upon the town, and it would settle down upon the inhabitants like a pall, bringing sickness and death into every family. But what do we say! What has been spoken of as anticipation, has it not already been realized?

About the first of July, last, a very offensive odor issued from

the large receiving vault above referred to, and was diffused over the whole cemetery. Some persons said it was perceptible to them while walking along the adjoining street. Soon after this epidemic disease, attended with symptoms of diarrhea and dysentery appeared in the town, and was observed to be very prevalent in the neighborhood of the cemetery, and along Green and Washington streets, which lead from the cemetery down into the town. Almost every family being affected, and in some families every member suffering more or less.

It would be easy to trace the cause of this epidemic, but we are unwilling to renew the sufferings of wounded affections by entering into details.

People of Georgetown, this whole subject has now been laid fairly before you. The experience of all nations and of all ages has been brought to your consideration, and it remains for you to decide whether you will still quietly fold your arms and look on. Will you let the experiment be tried again?—let your powers of endurance be still further tested—let death go on and do its work? If such is your determination, recollect that many a one of you may have a friend, a brother, or a sister, a darling child, or a beloved wife snatched from you, as the just punishment of your criminal apathy.

Or will you decide, inhabitants of Georgetown, to rouse yourselves up? to exercise your reason, and determine to adopt such measures as may be necessary to avert the impending evil. Let us remonstrate with those who,—prompted as they undoubtedly are by motives of philanthropy, and, from a want of information on this subject, impressed with a firm belief that they are conferring a benefit,—are, in reality, inflicting upon us a most blighting curse. If this remonstrance is disregarded, let us lay our complaints before the Grand Jury, that they, who are the legally-appointed guardians of the health of the District, may present this cemetery as a nuisance. If the Jury refuse to perform a duty that is imperative upon them, then let us memorialize Congress to repeal the act of incorporation, which was passed entirely from complaisance, without thought, and without a moment's reflection upon the baneful consequences which, it might have been foreseen would inevitably ensue.

## A P P E N D I X .

---

We append the following extract from a letter written by a literary gentleman who has devoted a long life to the promotion and diffusion of useful knowledge. We beg leave to call the attention of the reader especially to the fact that the location of Oak Hill Cemetery, situated immediately north of Georgetown, is calculated, in an imminent degree, to give rise to the "fatal effects" anticipated from it :

"From frequent notices in the public prints, I find that the disposal of the dead human body has become a subject of intense interest in Europe, but particularly in the large cities, such as London, Paris, Rome, Vienna, &c. The subject is one where the natural sensibilities of the living survivors oppose insuperable obstacles to a rational investigation, or adoption of any definite change, calculated to remove or lessen the obvious evils attending the manner and misplacements of local interment. Yet few, when the subject is placed before them, with the undeniable injurious consequences to the living of present practice, who will not grant the necessity of change. To lead to any beneficial result, we must set aside all those sensibilities, which, though amiable in themselves, prevent us from discussing death, as we would do any other subject we are forced to meet, and provide for its contingencies.

"The dead human differs, as to the consequences on the living, of the cessation of life, in no essential principle from other dead and decomposing animal matter ; whilst the human, of all living beings, is the most susceptible to the deleterious action of foul air. The natural law of self-preservation ought, therefore, to induce society to protect itself, in the case before us, as in any other of certain danger, by such a disposal of the dead as to prevent, as far as possible, injury from it to the living.

"For my own part, I have regarded embalming, placing in vaults, and crowded cemeteries, especially in cities, as barbarisms. When dead, we are, in fact, as completely and forever, as far as earthly intercourse is concerned, separated from the living world, as we were ages before our birth. To provide against the ill effects of miasma, the most active decomposition by fire, or other very active agent, or deep and isolated deposition in the earth, ought to be the means employed.

"If provisions were made by judicious enactments, many very serious inconveniences would be obviated, by making interments under legal forms. In the United States generally, and in the cities especially, the distress in families attending death, is enormously increased by the expense of funerals. These funerals, again, made in such manner as to enhance such expense, and aggravate bereavement. Were legal restrictions and forms established, and enforced, the injurious power of custom would be broken, and the welfare and health of the living be conserved, whilst all requisite respect would be paid to the departed. In fact, funerals ought to be conducted as if the departed had set out on a journey, from which they were never to return ; and that a bourne stood between the traveller and those left behind, which was never to be repassed.

"\* \* \* \* \* But there is another view of the subject of cemeteries, which I have not either heard or read, as made object of inquiry, and yet, in my opinion, is the most important ; that is, locality, as regards prevailing winds. With this sheet you will receive printed tables of the winds of Washington city and adjacent country.

"In advance, I lay it down as susceptible of direct and conclusive proof, that the western and north-western parts of all cities in the temperate zone of the earth, are more healthy than the opposite, unless the abiding laws of nature are coun-

teracted by some local cause. This observation is founded on extended experience. And let me add, that when atmospheric motion is consulted, the cause becomes not simply obvious, but demonstrated. In brief, we may at once decide, it is an imperative duty to consult and obey this great atmospheric law, in locating burial grounds, and also in the mode and manner of interments. And not only to abandon, but to prevent, by legal enactments, all modes of interment by which the cemeteries of the dead are made fountains of infection, sending the foul streams on the living."

*Prevalent winds at Washington City, constructed from data afforded by the monthly tables of the Rev. Mr. Little, and reduced to proportions of 1000.*

Months.	N. W.	W.	S. W.	S.	S. E.	E.	N. E.	N.	W. w'ds	W. winds with the N. w'ds added
January	410	100	190	30	47	10	149	65	700	765
February	151	142	166	181	35	20	181	137	459	596
March - -	300	104	117	120	87	30	138	90	521	611
April - -	270	115	190	130	40	10	165	75	575	650
May - - -	188	70	260	50	25	30	177	30	518	548
June - - -	147	40	393	70	75	00	164	40	580	620
July - - -	247	00	283	108	85	20	159	50	530	580
August -	221	17	327	26	180	10	221	53	565	618
September	125	22	220	129	140	31	241	71	365	536
October -	338	40	300	55	130	7	126	87	678	765
November	305	140	235	115	123	0	150	25	680	515
December	369	67	154	127	102	0	149	53	590	643
Amount.	3971	857	2835	1141	1069	168	2011	776		

THE END.



